



Housekeeping

by Glenn Hasek

Natural ways to kill the lodging industry's dirty little secrets

*Another great article from The Rooms Chronicle® the #1 journal for hotel rooms management! ***Important notice: This article may not be reproduced without permission of the publisher or the author.*** College of Hospitality and Tourism Management, Niagara University, P.O. Box 2036, Niagara University, NY 14109-2036. Phone: 866-Read TRC. E-mail: editor@roomschronicle.com*

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Here's a riddle for you: They are hitchhikers you would never want to pick up. To them, we look like Big Macs on stilts. If they reproduced as fast as rabbits, we would all be better off. What are they? Bedbugs.

They are spreading like wildfire across the country, with hot spots in New York City and states such as Florida, Texas and Ohio. They are also living large in the Southwest. One motel owner in New Mexico is paying \$63,000 to get rid of them. How bad is it in New York? Last year, there were almost 7,000 bedbug complaints. The number of complaints in 2005: 1,839. In 2006: 4,500. Of course those were not all hotel-related, but hotels and motels have most definitely been hit hard.

"A lot of hotels don't want to admit they have a problem," says Bruce Brenner, chief operating officer for RMB Group, LLC, the maker of Rest Easy, a natural bedbug killer and repellent. "Roughly 75 percent of all hotels and motels have or will soon have a problem with bedbugs. That estimate may be low."

Bedbug infestations have grown as travel has increased. Those areas receiving the highest volume of guests have the most problems. Bedbugs can easily be carried from one location to another, given their tiny size—in a suitcase, for example. Eggs are as large as a grain of salt and adults are only about 3/16 inches in length with oval, flattened bodies. Female bedbugs can lay 500 eggs in a lifetime. In hotel rooms they can easily hide in box springs, mattresses, behind headboards, in the walls, or any other place where they can easily access a blood source—namely your guests. Bedbugs have even been found in cell phones. If a particular guestroom does not provide a steady food source, they will move to another. Adult bedbugs can go months without eating.

Bedbugs can build resistance

According to Nick Martello, president and CEO of US Biologics, maker of the natural bedbug killer SporicLEAN, bedbugs can build up a resistance to toxic pesticides traditionally used by pest control companies. That is just one of the reasons it can take numerous chemical applications to eliminate them. Some treatments do not kill the bedbugs at all stages of development and others do not reach into the walls or crevasses where they hide.

Using chemicals to eliminate bedbugs can be expensive and can remove rooms from available inventory for days or even weeks. Toxic treatments can also physically irritate staff and guests and leave harmful residues in guestrooms. Fortunately for the lodging industry, many good "green" bedbug treatment solutions have come along in recent years. While each in and of itself may not be the ultimate answer, together they can ensure that a property is consistently free from bothersome bedbugs.

Don't wait until it is too late to plan for bedbugs. Consider the following environmentally safe options: bedbug-sniffing canines, heat, freezing, mattress encasements, and naturally formulated liquid solutions that can be sprayed on or applied by other means.

There are different ways to detect the presence of bedbugs. Of course you do not want to wait until a guest shows up at your front desk with bite marks, or until an attorney calls threatening a lawsuit. Sheets and mattress seams should be regularly checked for little red spots—the remains of crushed, gorged bedbugs. Look for dark spotting and staining, which is the dried excrement of the bugs. Also present will be eggs and eggshells, the brownish molted skins of maturing nymphs, and the bugs themselves. Teach room attendants how to look for them and implement a schedule to make sure this is done. Have maintenance personnel check harder to reach areas. If you want to really know whether or not there are bedbugs present, hire a company that uses bug-sniffing dogs. Dogs, with their superior sense of smell, will find them immediately. Two companies to check out include Advanced K9 Detectives LLC and Assured Environment.

Make it hot, hot, hot!

Chromalox offers a ThermEx Heat Remediation Solution that was developed in partnership with Massey Services. The system can either be purchased by a property owner or implemented by a pest control company. ThermEx Heat Remediation Solution includes two forced air heaters, a data recorder, trailer for equipment transportation, power distribution box and comprehensive

technical training by Massey Services. A Chromalox heater heats the room to a targeted temperature range, which kills bedbugs at all stages of development—egg, larvae, pupae and adult. “It’s minimal downtime for a room,” says Christopher Molnar, director of sales for Chromalox. “Just one or two days. The heat penetrates the entire room. It is not a spot treatment. It penetrates the walls and everything in the room.” (Also check out Cencal Thermal Treatment, Inc. and Precision Environmental, Inc.)

Another way to address bedbugs with heat is with a dry vapor steam machine. Rest Assured MC sells this system that pumps dry steam at a temperature that is fatal to bedbugs at all stages of development. On the opposite end of the temperature spectrum, Rest Assured also offers Cryonite, a nontoxic technology that uses carbon dioxide to freeze bedbugs to death. According to Lorne Chadnick, president of Rest Assured, a patented nozzle ejects a carbon dioxide snow of optimum particle size and speed that quickly eliminates the bedbugs. The carbon dioxide reaches into deep cracks and crevices.

Encase mattresses and box springs

Another important step one should take is to encase all mattresses and box springs. Encasements eliminate two potential areas where bedbugs can hide. According to Petra Minoff, vice president of sales for the hospitality division of Protect-A-Bed®, one should not purchase just any encasement but a high quality and durable product. For more detailed information about mattress and box spring encasements, please see Petra’s accompanying article.

Put natural oils and enzymes to work

The aforementioned RMB Group and US Biologics also offer natural products that address the bedbug problem. RMB Group’s Rest Easy is a spray solution that includes lemongrass oil and cinnamon oil. According to RMB Group’s Bruce Brenner, Rest Easy kills 90 percent of bedbugs within five minutes of contact and the remainder the spray touches within 30 minutes. Rest Easy dissolves bedbug shells and eggs naturally. Rest Easy works for up to a week. Brenner says it should be used as a preventive measure in each guestroom every five to seven days. Areas to focus on, he says, include around the bed, the woodwork along the floor, drawers, closets and other locations where bedbugs might hide.

US Biologics’ SporiCLEAN is a nontoxic, non-chemical product that uses natural enzymes to kill bedbugs. The major ingredients in SporiCLEAN are food grade multi-enzymes that consist of protease, amylase, lipase, cellulase and carbohydrase, along with several sub-level enzymes and a blend of organic coconut oil. When SporiCLEAN is sprayed on bedbugs, they die quickly.

“Enzymes are nature’s biodegrading solution,” US Biologics’ Nick Martello says. “It’s as simple as science and nature. The protease enzymes in SporiCLEAN are the most environmentally-safe way to dislodge, degrade and digest bed bugs.”

Before formulating a strategy to prevent and kill bedbugs, be sure to consult with those experts who know which solutions are friendly to the environment, your guests and staff, but deadly to the bedbugs. ✧

(This unabridged article first appeared on the [Green Lodging News](http://www.greenlodgingnews.com) website. To sign up to receive the weekly [Green Lodging News](http://www.greenlodgingnews.com) newsletter, go to www.greenlodgingnews.com. Glenn Hasek can be reached at editor@greenlodgingnews.com.)